MOE RFP Overview

Vicki Dulski
LDCM Ground System Manager

Contract Type and Scope

- **Small Business Set Aside**
  - NAICS 541512, Computer Systems Design Services with a $23M size standard
  - Prime offeror shall provide at least 50% of the work needed to accomplish the contract
- **Contract Type**
  - Cost Plus Award Fee (CPAF) during development
  - Cost Plus Fixed Fee (CPFF) for sustaining engineering
- **Contract Includes**
  - Design, development, integration, testing, and delivery of the MOE
  - Installation and integration of the MOE at GSFC MOC, USGS/EROS MOC, Instrument facility, and observatory facility
  - Support of Ground Readiness Tests, Mission Readiness Tests, and Ops Readiness activities
  - 5 years post-launch sustaining engineering
  - Option for 5 1-year extensions for sustaining engineering

MOE Contract Overview

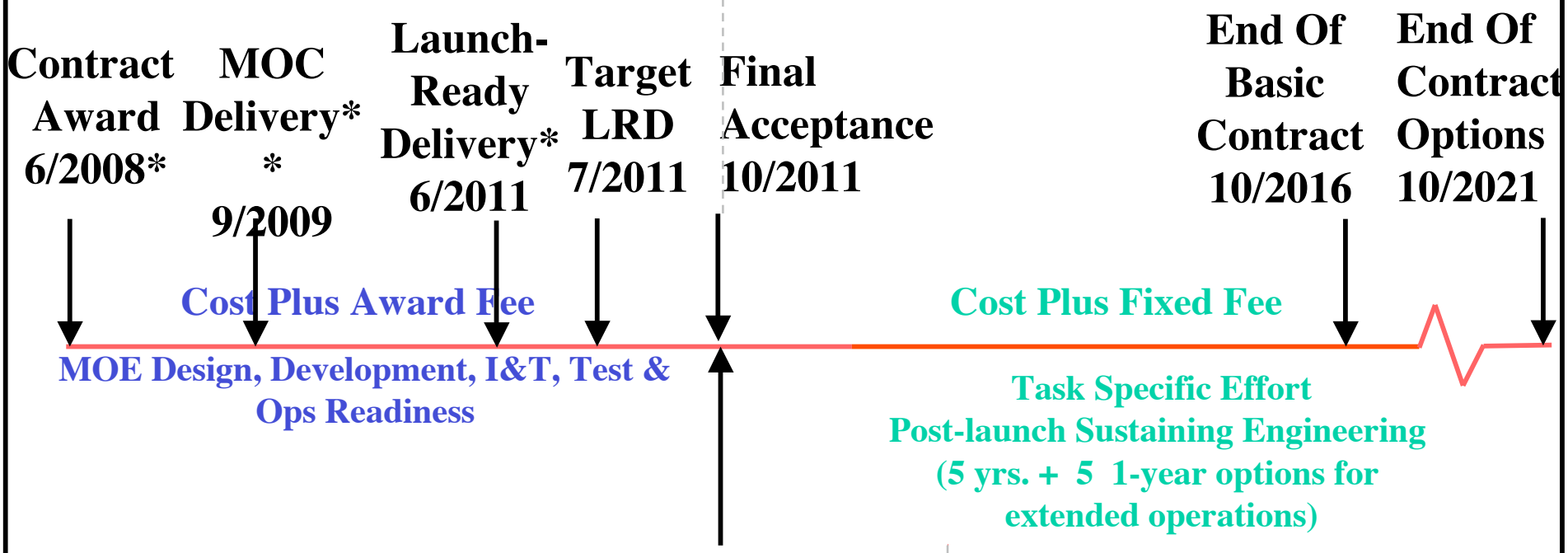
LDCM

MOE Contract

Design, Development, I&T. Delivery & Integration, Test and Ops Readiness Support, Post-Launch Sustaining Engineering

Mission Responsibility - NASA

Mission Responsibility - USGS



* Assumed award date

**Incremental deliveries/releases throughout development

Deliverables

- **Deliverables**
  - **Software Releases**
    - Off-the-Shelf (OTS) Release
    - Command and Telemetry (C&T) Release
    - Ground System I&T (GSIT) Release
    - Ground Readiness Test (GRT) Release
    - Mission Readiness Test (MRT) Release
    - Launch Ready (LR) Release
    - Post-Launch (PL) Release
  - **Hardware**
    - Observatory I&T Facility Functional Units (mini-MOE)
    - Instrument Development & Test (D&T) Facility Functional Units (mini-MOE)
    - NASA/GSFC Mission Operations Center Functional Units
    - Launch Support Room Functional Units
    - USGS/EROS Mission Operations Center Functional Units
  - **MOE-unique Software Development Tools/Environments (if any)**
  - **Other items (see Model Contract B.1)**

RFP Documentation

- Contract
  - Sections L & M
- Statement of Work
- Contract Data Requirements List
- MOE Requirements Document
- MOE Mission Assurance Requirements
- MOE Performance Evaluation Plan
- LDCM Surveillance Plan
- Instructions for Preparing MOE Cost Charts
- MOE Cost Charts
- MOE Sample Basis of Estimate
- Past Performance Questionnaire
- GOTS Software Tools

RFP Documentation

Contract Sections L and M

Section L Preparation Instructions

- 30 days preparation time

Item	Page Limit
Offer Volume	None
Mission Suitability Volume	50
Cost Volume	
Basis of Estimate	2 pages per
BOE	
Past Performance Volume	35

Contract Sections L and M (cont.)

Mission Suitability subfactors and weighting:

	Points
Subfactor A – MOE Technical Approach	425
Subfactor B—MOE Integration and Test Approach	325
Subfactor C—MOE Management, Systems Engineering, Assurance	200
Subfactor D—MOE Safety and Health	50
Total	1000

Adjustment for Cost Realism, up to 150 points

RFP Documentation

Statement Of Work

1. **Management**
2. **Systems Engineering**
   - Includes Special Studies
3. **Ground System and Software Assurance**
   - Also see the MOE MAR
4. **MOE Development**
   - 4.1 Design and Development
     - 4.1.1 Telemetry, Command, and Control
     - 4.1.2 IT Security
     - 4.1.3 Communications Security
     - 4.1.4 Planning and Scheduling
     - 4.1.5 Mission Monitoring and Analysis
     - 4.1.6 Flight Dynamics
     - 4.1.7 Memory Management
     - 4.1.8 Automation
   - 4.2 Integrate and Test
   - 4.3 Delivery Support
5. **Integration, Testing, and Operations Readiness**
6. **Early Orbit Operations and Acceptance**
7. **Engineering Support**
8. **Optional Extended Support**

RFP Documentation

Contract Data Requirements List

	Number
• Program Management (PM)	9
• Reviews (RE)	6
• System Engineering (SE)	8
• Mission Operations Element (MO)	17
	40

RFP Documentation

- **MOE Mission Assurance Requirements**
  - Quality Management System
  - Requirements
  - Reviews
  - Assurance Activities
  - Requirements Phase
  - Design Phase
  - Implementation Phase
  - Testing Phase
  - Delivery Phase
  - COTS and Non-COTS, Existing and Purchased Software and Hardware
  - COTS and Non-COTS Management
  - Databases
  - Reliability, Availability, and Maintainability
  - Risk Management
  - Software Configuration Management
  - Independent Verification and Validation (TBR)

All MAR documentation requirements are listed in the CDRL

Acceptable GOTS Software Tools

- Contractors may propose the use of Government Off-the-Shelf (GOTS) tools in performance of this Contract.
- The Government does not require the use of GOTS tools in the development of the MOE.
- GOTS tools will be made available to the Contractor under a Software Use Agreement, for use only in performance of the MOE contract.
- The following is a list of acceptable GOTS tools that may be proposed for use in development of the MOE under this contract.
  - Advance Spacecraft Integration & System Test (ASIST)
  - Integrated Test and Operational System (ITOS)
  - Multi-Mission Three-Axis Support System (MTASS)
  - Automated Mission Planning and Scheduling (AMPS)
  - Trending Analysis and Plotting System (TAPS)
  - Integrated Trending and Plotting System (ITPS)
  - Real-time Object Modeling Executive (ROME)
  - Alert Notification System Router (ANSR)
  - Goddard Space Flight Center (GSFC) Mission Services Evolution Center (GMSEC) Application Program Interface (API)
  - GMSEC Reusable Events Analysis Toolkit (GREAT)
  - Criteria Action Table (CAT)
  - X-Flight Dynamics System (XFDS)